# **FOMA 16mm Reversed**

By Michael A. Carter

#### Introduction

Foma R100 16mm film was tested to determine best exposure and development techniques. D-94 was the developer along with D-95 and mostly Dichromate bleach; Permanganate bleach was used for the last few. 3 feet of film at a time was shot and developed, the ends spliced together, then projected and videoed off the projection screen. Loops of film were labeled with a paper on each and pinned onto a bulletin board where they sat for almost a year. That is because the computer I had been using for 10 years broke on Jan 2, 2022. The present date is Nov 19. Two different films were used, double perf and single perf.

**Bulletin board intro** 

https://youtu.be/RYSOo0JOZeM



#### Dec 28 2021 two of them

https://youtu.be/QDsF6\_jyC\_k



Keystone A-12 1/30 f16 Weston 200 on skin C2X 80 ASA Dev. D-94 2 min 65 degrees 2 min re-exposed 2 min D-95 SD This was a test of the camera shutter. A camera used in England had the shutter out of sync with the pull down claw and pictures were blurred as a result. That is what I was looking for. The Keystone A-12 camera has a two lense turret.

Other Keystones have only one lens. However, inside the film compartment are two nuts that hold the gate in place. Those are the same no matter which camera is used. The gate has a little wiggle room to slide back and forth. Sometimes, when two or more different cameras are used and films are shown together, the frame line appears in the projected image, and sometimes it is not possible to correct it. Then, the gate has to be moved over a little so the sprocket holes line up with the frame lines the same on both cameras. That is what I was looking for. I wanted to see how the frame lines lined up with the sprocket holes. They were fine.

These are some of the things that have to be avoided and corrected before 100 feet of film are exposed and the reason for making 3 foot tests.

This film has very black leader. There are white dots on most of the Foma films in this group. This one is clear of them. 65 degrees developing temperature may be the reason for it. 80 ASA may be another reason.

This film has parts that stuck together and caused brown areas. That was a lack of practice loading the metal 110 reel; too much agitation could have caused it; I had not started agitating differently yet.

The next page in the notebook has a note added in the center of the page. A note in the margin next to it says, "NOT tried yet, try it" This is the note: Soak the film first a half hour, that may reduce antihalation residue spots from forming. I forgot to do it. The last few films in this series are white dot free. All the others have them.

The camera makes a THUNK sound just before it stops running to let you know the wind is about all used up.

Other tests were made between this test and the next one in the series but not included. I was learning how to expose and develop this film. Should skin be read using C2X or the inverted triangle on the Weston light meter? What ASA is 6 min at 64 degrees in D-94? How much should the Weston be pointing down to read

the light? Cooler first developer will darken images.

Temperature is very critical. A test was developed at 63 to 64 degrees F and was darkish. Another test was developed at 64 degrees F and was light.

The first video capture of this file was made using the 1080i camera. It was found by looking for the Dec 30 something date in 2021. It is in

Canonalb/21123100/00000 It is the first one. Since it is a shutter test of a Keystone camera it may match the notes for Dec 28 test 2. 80 ASA.

The Keystone A-12 camera exposed 3 feet of Foma R-100 16mm film in .8 light on a Weston light meter, using the f2.7 Wollensak lens that came with the camera, at 2 feet focus, 16 fps, 1/30. Three dip tests later perfect images were had. The ISO/ASA turned out to be 500 in D94

C2X was put on .8 so the triangle on .8 would make the ASA/ISO 250 instead. Whatever. It worked at f2.7

## Dec 29 2021 https://youtu.be/HtFEvXjtNSg



A dip test is attached to this one and it is brown. This is the second file in the notes. 3 + feet of Foma R-100 16mm film had to have dip tests added to it to make it long enough to project.

This is the second test in the notes. Dip tests had to be added to this loop to make it long enough to project. Foma R-100

16mm film was used, 3 feet of it, in a Keystone A-12 camera indoors, daytime, overcast outside, with daylight bulbs in the chandelier in the dining room. The Wollensak 17mm lens was used focused at 2 feet, f2.7- and 16 fps. The Weston light meter read my face at .8+1 towards 1.6 which is 200 ASA at f2.7 with the triangle and 400 ASA at f2.7 with C2X instead. The floor lamp was not on, kitchen was.

Development. The chemicals were getting old. I just wanted to do something anyway, easy. So, room temperature was used. It was 62 degrees like the best dip test done already. Bleach and clear were 6 minuets each. It worked to clean the film of any color like what was on the dip tests. Agitation had been reduced 1/3. First developer was a full 8 minuets. All 3 dip tests had to be spliced onto this film to make it long enough to project. The new 16mm Bolex splicer worked great. There is a note on this page in the notebook: Soak the film first a half hour. That may reduce antihalation residue spots from forming. I forgot to do it.

#### Dec 30 2021 00003 4

#### https://youtu.be/D2GwLmt1vDs



In another try I noticed that the chemicals had warmed up 2+ degrees, so the timer, during the first developer, was reduced 2 minuets. Good thing. Pictures came out at the maximum end. Any longer would have spoiled them. The speed turned out to be 1200 ASA/ISO.

Another test was made. A gray card was added, but light readings were made different ways. They all worked.

Weston. Development, however, is super temperature critical, not so much time. D-94 on Foma 16mm 2R 100 ISO is very sensitive to differences of 1-2 degrees f. A water bath was used, unlike the previous times. 1200 ASA/ISO 16fps, 1/30, Keystone A-12, Wollensak f2.7 wide angle 17mm lens on a all most raining overcast late afternoon with small apertures, and terrific contrast was achieved. Two brackets were made and one longer shot all on 3 feet. A single frame was made with my hand over the lens in-between brackets. The leader and the SF are medium density. The film is bright! It Selenium tones darker nicely for even greater contrast.

Light measured 6.5 pointing down and about the same on my face. Foma R-100 @ 1200 in two temperatures. Most likely 400 speed film pushed 2X.

It is highly unlikely that this film is R-100, rather, only the box is; the film is most likely R-400 instead. The film is double perf, the box shows both kinds of perfs, Foma sells 400 speed film.

My latest calculations show 1600 ASA/ISO was used. A 2 stop push is normal, not 4 stops.

A Keystone manual gives the shutter speed to be 1/36. On the Weston meter that is the line between those red and black squares between 25 and 50, or the center line. That fell spot on f16,

#### Foma 1200 Dec 30 2021

https://youtu.be/H0vPQfBQH3U



16mm Foma R-100 was exposed at 1200 ISO and developed at two different temperatures the same length of time. These two clips are each only 3 feet long, 6 feet total in a loop of 3 feet. Sorry about the bad video but it is difficult to avoid flickering. I only wanted to figure out what works.

#### Foma 16mm Dec 31 2021

https://youtu.be/GS rmZUYv s



Notes are from Dec 30, 2021. Two loops of Foma 16mm reversal at 1200 ASA. Dec 30 and Dec 31, 2021. Focus was made closer on the bushes, not to infinity but at 15 feet or so. Take this to the bank. Real rich. Nice. Darkish film. Leader is medium. Most of the shots look great. D-94 at 6 minuets in 63 to 64 degrees F re-exposure for 1 minuet and second

developer D-95 was also 1 minuet. 1200 ASA Weston meter overcast late afternoon, almost raining. Keystone A-12 4141 gray camera. One was too light, one was too dark, somewhere in-between. The light one, 63 the dark one. Be sure to use C2X on skin the next time.

There are two pages of notes more before the next film. A gray card was used to measure the light in the front of the house. It read 6.5 1200 ASA. 1/30. D-94 was 65 exactly in 6 minuets re-exposed 2 min and SD was 3 min in D-95. Those are a lot of changes.

The selfie was C2X and a 2 foot focus with a 17mm lens on the A-12. The landscape was f16 using the triangle.

The cool thing is that at 6.5 light and 1200 ASA (I grew up using ASA and am loathe to change) f 16 was the setting for the overcast mid winter noon light, which was the maximum on this lens. The selfie was f11 and looks great, too. A gray card was held flat against my chest and a Weston light meter read it as 6.5 I stood facing the street. (pointing down was 6.5/3.2) That would have been ½ stop lighter, no need. As it is the houses across the street turned out lighter than actually seen since they faced me, facing the light, what there was of it, with their backs towards the light. Half a stop LESS light would have worked, but there was no f22. I wondered about the speed.

The washed film was hung then wiped gently with a rag soaked with alcohol. The previous landscapes were spliced in. At 65 degrees a half min. could be shaved off to darken it. Or just cool it to 65 a little closer to 64.

Actually, the darker landscapes done earlier must have been closer to being correct. Strange that temperature must be so exact. It is a challenge to adhear to such exact tolerances. Once I get it right I'll have to repeat it over and over again and again.

The exposure cannot be reduced since it is at the maximum now. 24 fps would reduce it. I want to develop less by lowering the temperature or reducing developing time. Wait for rain.

Is it worth the effort to do another test to prove 65 f will look good? YES! Photo of chems in sink

The cool thing is f16 was used on the landscape. That is the maximum on this lens. The day was overcast in mid winter; light was only 6.5- at noon.

The proof is in the pudding and it is a little too light. So, lower the temperature half a degree closer to 64. It is real close. The lens cannot be closed more to darken the exposure since it is at the maximum now f16. Or, shorten the time.

#### Foma 16mm R Jan 1 2022

https://www.youtube.com/watch?v=wVic-Tp3OcM



Wait for rain. Yes. Rain. Use 1/36 my face was 1.6 f8-11 landscape 16 fps 17mm lens 1600 ASA Two stops less light, one unit higher speed, one degree cooler temperature.

Developed in D-94 six minuets, re-exposed for one minuet, second development one minuet. 2R film. This loop is the third one on the bulletin board. Perfect. Projected nicely. Not

light. Not dark. Just right. 2R film.

Then, the iMac died.

The original Foma 16mm 2R that was in a R-100 box, turned out to be R-400, was developed properly at 1600 ASA/ISO. I finally got it right. A one degree temperature change made it work right. One degree. All those tests! Today it rained and was dark out enough to try again. But I got it projected to look nice. Back to pen and paper for me now. D-94 is being used so film may be developed as rapidly as possible for customers some day. Foma 400 has been developed in short times in D-94/95. I hope I can read my notes well enough to duplicate my tests with longer films.

I wonder if the Foma single perf, super 16, film being sold is 100 ISO, or like mine?

#### Foma 16mm R Jan 4 2022

https://youtu.be/C4gRkfvONQA

16mm Keystone A-9 Shutter test

This is the camera that I filed off the top row of sprockets and had to reattach the spring drive on inside the guts. It didn't work when it arrived. So, no loss if I messed it up more. It had not been tested yet.

Take 1. Three feet of Foma was loaded in the dark; no spools were used. 64, 6, 1, 1. That means 64 degrees in D-94 for 6 minuets, re-exposed 1

minuet and second developer 1 minuet. It was a copy of a test made Jan 1, 2022 noted in the previous journal. 1600 ASA. D-94 64 degrees 6 min exp 1 sd 1 Keystone A-9 J-6765 Modified to SP 1R but 2R film is used. B&H 1" lens non focusing f2.5-16. 24fps Light was 13 at 1600 ASA was f22 but shot at f16. The light reading was down at the white fence; the sun was almost up, not quite. 'Oops' the lens was on f8. Crap.

Take 2. Another piece was loaded. F16 at +2 over 24fps - the sun was up. No light reading was taken.

I am not sure what light meter was being used then. Sekonic or Weston.

This is an exercise in developing 2 x 110 reels at one time. A  $3^{rd}$  110 reel that is empty went on top. Temp was 60 degrees to begin. Soak film. -how long? Adjust bath.

Results. The films are dark but pictures are free of any vertical smears along the length until the last 4 frames where it was pulled through the gate without the top feed sprocket wheel.

#### 64\* 6min 1 exp 1 SD

Chemicals were worn out. These two three foot pieces were spliced together to make one loop to project. — check it for white dots — The mistake of f8 doesn't show. I may not have used it after all. Otherwise images would be too light. However, the film is dark. I missed proper exposure. It WAS darkish outside. The chemicals are old. Film had been soaked.

Yet, I would like to try again. New chemicals are needed, perhaps a bracket, too. How about using the Minolta meter?

Projection was videoed withthe phone and put on Face Book. Pavan liked my note. Strange I'd never tested the camera before now. Come to think of it, the Criterion used in England, that made vertical smears, has not been yet either, and it has a different sort of shutter gear shape in it. It remains 2R.

## Foma 16mm R Jan 5 2022 INT

https://youtu.be/4Gj5jXI59qc



Shutter test Keystone A-9 Criterion NJ-3421 orange leather Loop 1. Foma 2R - 400 ASA? 17mm lens at 2 feet f4+1/3 towards 2.7 interior of me in the rocking chair. Light was .8 - 1.2 M ASA C2X

The Weston light meter has a point 8 on the low scale so that may have been what was used.

The camera had a low wind; it hadn't been run in a long time and was irregular at

16 fps. Foma 400 2R film 3' long. No outside light. The overhead lights plus a floor lamp were on. The Weston (right!) on my face. Overhead bulbs were 4/5 daylight + 2 Tungsten; one in floor lamp, one in overhead.

New Chemicals.

This shot was developed with the next one. 64, 6, 1, 1 SD was D-95 Results were that the leader is lighter, so use  $\frac{1}{2}$  a degree less or less time.

#### Foma 16mm R Jan 5 2022 EXT night

https://youtu.be/rpr0QHpWQBI



Loop 2. Small short loops are difficult to project. Make sure to splice both sides. Check that the holes are open. Trim the edges.

Exterior lights in early morning darkness. 2" Elgeet f1.5 lens at infinity 10fps. Lights were centered as best I could in short

bursts without brackets or single frame slugs. No light readings were taken. Development was in new d-94 at 64 degrees for 6 minuets 1 min. re-exposure, 1 min SD was D-95

Results are that the leader is lighter, new chemicals lightened it. Try less time a little or use ½ a degree cooler. Almost f4 inside - very bright. Outdoors needs darker blacks. The shutter is synced just fine. Selenium tone it.

#### Foma 16mm R Jan 6 2022 A

https://youtu.be/qMg3d5J7o2A



2 x A-7 tests on Foma (400) exterior

Test 1. Keystone A-7 No.A131233 The green camera that clanks like a tank but winds silently. Bracket at 800 ASA and develop less time. 2" Elgeet f1.5-16. This lens, as it turns out, is out of focus at infinity. F **16**, **11**, 8, 5.6, 4, 2.8, 2, 1.5 Light was overcast 13/25 800 ASA was f16/11 320 ASA 22+ 1 block

towards 16

Develop 4 minuets. 64, 4, 1, 1. Do it again with only one exposure. This film ripped in the projector. The f16 one is best and most likely too light projected. Lots of clear parts.

#### Foma 16mm R Jan 6 2022 B

https://youtu.be/D8JwxM1-log



Test 2. A-7 with a f2.8 Yavar 75mm lens that has great focus. Grass was 13 and that makes the ASA to be 125. My face was 6.5+1 16 fps f8/5.6

Much darker overall and more better; both were wiped with a gag soaked in alcohol. This one has images that are too dark and some a little light. Leader is nice and dark. 64 degrees

developed 3 minuets re-exposed 1 min and SD 1 min

#### Foma 16mm R Jan 8 2022

https://youtu.be/YtCpa9-GY M



Selfie in Rocker 1.2M or 1200 ASA Keystone A-12 camera. 17mm Wollensak lens.

A slate was used and found to be very useful, too.

Interior while sunny outside, but none shining inside, light was 1.6-1 block on skin. A gray card was .8+ The slate was f2.7 on a 2' focus by the floor lamp. It was framed on the top left of

the viewfinder. Single frames were used on it. C2X was used from the face skin reading to give f4/5.6 as the exposure

Development was 64 degrees 6 minuets with 1 min re-exposure and 1 SD in D-95 64 6 1 1

The leader is light; The pictures are perfect, so is the slate, there are many dots. The slate could be more to the left and up a little. The room could be f 5.6 as the face got more light. The slate was held low and got the most light.

This method would take a Selenium tone nicely.

The point was to use a small aperture indoors.

It projected very bright, huge, nice! Cut it, card it, big star on this one. Glue splices go through the projector better than do taped splices.

#### Foma 16mm R Jan 9 2022 A

https://youtu.be/Z0gFda0pyi8



Interior of me on the rocker. Overcast and very dark outside. A slate was photographed with the date and D-94.

Switar 16mm f 1.8 lens at a 2 foot focus.

Exposure was f2.8, light was .8 on my face, 650 ASA C2X

Development was 64 degrees 5 min 1 re-exposure and 1 SD

New bleach and clear are needed. Replenishers have gone dark exposed to air. I didn't have enough tiny bottles.

I want darker leader and blacks. This lens is out of focus. Blurry. The leader almost looks medium. Pictures seem darker blacks, lights are good. Slate is good. This is better than the 8<sup>th</sup> version. Replenishers in tiny bottles were dumped out.

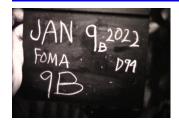
Very bright projected. Could be 800 ASA or 1/3 stop less exposure. 4 frames of the slate are almost able to be read during projection.

Density would increase if re-exposure were 3 minuets and if Second Developer were longer like 3 minuets, not 1.

Selenium toning may not be needed, but helps darken thin film. Ya gotta start somewhere.

#### Foma 16mm R Jan 9 2022 B

https://youtu.be/YlbyCd0FltE





INT Me on Rocker, Again
Slate f 1.8 12 single frames top left
Keystone A-12 J-4141 16 fps
Switar 16mm f 1.8 lens
Foma 2R 3' piece
Dark out. Light was .8+1 block to 1.6

C2X 320 ASA f2 1/36 I mouth "F 2" My head was next to the floor lamp and the kitchen light was on; it seems to make a difference.

A Photorio article about Foma white spots said to presoak film 30 minuets, use a longer bleach time, rinse after bleach with some alcohol. I made some fresh Dichromate bleach. A 30 min filtered water presoak was used, alcohol rinse after foto flow.

#### 64 4 1 1

Results. I can't see white spots. Black leader is darker. There are some black and white spots anyway.

The slate looks better. More exposure would help. The film looks thick. Just 1/3 to ½ stop dark.

Agitation was 20x to begin then 3x/30 sec and no extras. Re-exposure had been longer. Density increased.

Use more light indoors and develop 3 minuets.

Presoaking and bleaching longer seemed to work.

Selfies at .8 at one click lower than 800 ISO at one min less developing made better blacks

The exact same setting, light, exposure and developing, everything, could have even greater density, thus blacker blacks, IF: It were toned in Selenium, re-exposed 3 minuets instead of 1min., and if the second developer was 3 min. not 1 min.

D-95 is what I have been using because it is on the same page as D-94 in Dignan's book. One min re-exposure close to a 60 W ceiling light had been my usual time until I discovered that my time was wrong for the second developer. I had been using three minuets then saw it was supposed to be thirty seconds. That gave inconsistent densities so I used one minuet. That is when exposure was increased to three. Three and three make darker leader than one and one confirmed by a test. One min each is much easier and is what I have been using. Dektol seems to last a long time while D-95R turns brown in air in a day. If The time of re-exposure and second development were increased to counteract the lightening effect D-94 has the longer it is used in a first developer. Selenium toning was not needed.

#### Foma 16mm R Jan 10 2022

https://youtu.be/ghrldqK1EQk



The Keystone A-12 camera with the Switar 16mm lens was moved closer to see if it would focus better; it does better at 1 foot focused at 2 feet.

Leader is dark now. Light was 1.6 using C2X f 2.4 16fps 320 ASA All the lights were on plus some sun. Previous f2 at

.8 looked the same.

White spots are in the black leader. No pre-soak makes for many white spods. No dots on pre-soaked film, unlike this one.

The Switar may work better on a Bolex; try a washer or a paper under it.

#### Foma 16mm R Jan 12 2022 A

https://youtu.be/gNzV\_XrVqRM



Melita still had a cast on her left arm.

Keystone A-9 Criterion NJ-3421. B & H 17 - 68 f 2.2 zoom lens This camera is 2R. Old 2R Foma film 3 feet long, no spools. 400 ASA 1.6 Light f 2.8 Nine foot focus from Jame's chair 10 fps, oops, old film. That was the first try.



## Foma 16mm R Jan 12 2022 B https://youtu.be/jH23KQugreo

16 fps from the kitchen door low, f 2.8 10 foot focus 400asa 64 degrees developed 4.5 minuets, 2 min re-exp 2 min SD This is the first time developing at 4.5 min leader should be darker than when developed at 5 min. Bleach was 8 min.

2 zooms. White dots, could be worse, jumpy registration a result of tiny loops in the projector. 10 fps exp good, close up was sharp. 16 fps was darker with blurry close up. It is difficult to focus indoors. Use a flash light.

#### Foma 16mm R Jan 13 2022 A

https://youtu.be/y0 sDiR8xOI



Many (6) zoomed in static shots, almost like a bracket, wide to close; she holds an index card with the date on it. There are some white dots dancing around.

64 6 5/3 3

f 2.8 1200 ASA 16 fps Leader is very dark. Full soak 30 min. No inverting. Bleach 5, clear 5, fix 3 all 68 f













f 4/5.6 C2x f 4

f 4/2.8

f 2.8

f 2.8/2.2

f 2.2

Lights were on daytime overcast 1.6-1 block c2x

Leader is no longer light, it is medium now. Less re-exp and SD raises ASA. Best to refocus after zooming in. Don't assume focus stays sharp after a zoom.

#### Foma 16mm R Jan 13 2022 B

https://youtu.be/mJRKeQosJUs



New Foma R-100. 1R.

Keystone J-6765 with a B & H 1 inch f2.5 non focusing lens Ext. Overcase, rained, late afternoon, light was 3.2 pointing down, 100 ASA, front porch, f2.8 a little towards f4 Develop as Jan 6 64 3 1 1 Did not soak. The leader is almost opaque it is so very dark. Pictures look great! Almost

no dots in leader by agfa loupe. Maybe you get fewer white dots in black leader. No dots at all projected. Brilliant effect. Perfect exposure. Sharp as a tack.





## https://youtu.be/HRLqBMHPgBI 1600 ASA ext front & back Keystone A-12 17mm lens 24 fps Front views Light 13 grass 1/50 f16 Development was 64 degrees for 6+

minuets with 1 min re-exposure and 1 SD bleach 5 clear 3

Back view light was 6.5+1 block f16 as much as possible 16/22 16 fps a selfie then still clips of views. Better camera loading eliminated smeared images.

Exposures are excellent for a gray rainy day. NO white dots, hardly, but some black ones. Film is warm; bleachwas used as was clear; films are more clear when they are fresh unused bleach and clear. I didn't open the lens for my skin.

Leader is black, dark, medium dark, not light. New film is better than old film. The recent delivery of 16mm Foma R-100 single perf no longer has white dots, at least not at 100 ISO on a wet late afternoon.

A nice gray overcast day to try out 1600 ASA/ISO on some newer Foma R-100 1R 16mm stock in my Keystone A-12 with the 17mm lens. f16 had to be used. Leader turned out very black, like the film was not pushed 4 stops at all. Hardly any white dots but a few black ones. f16 worked at 24 and 16 fps. Not light and not too dark, a little dark. Could be 1200 iso

#### Foma 16mm R Jan 15 2022

https://youtu.be/hlf7pP8W-NA



A selfie at 3200 ASA on new Foma R-100 in a Keystone A-12 with a 17mm lens at 1/36. Light was only from windows on a hazy cloudy day outside. .4 on my face C2x f4 16fps 2 foot focus. Smaller loops were made loading the camera. 3 feet of film. The notebook page date had a 10 inch focus and f4 single frames. 64 degrees 8min FD 1exp 1SD

Bleach and clear have to be new and were used at 68 degrees. Only the FD was 64 Much of the test stuck to itself on the outer rings. The paper is correctly exposed; My face is very underexposed, the the reflection of the window is correct. The leader remains dark.

It was dim and not very light where I sat. The developed film reflects that. Projected, I <u>should</u> look dark. Some at least. The notebook is perfect. The leader is black. It didn't become lighter. Extra time in bleach and clear, 8 min and 6 min, really made the film colorless. That worked.

I wonder what 9 minuets developing would do?

I think the wrong spiral was used and film came undone.

If a flashlight were on my face I would really light up.

I can't believe how dark the film is. .4 isn't much light but the room wasn't in the dark. A faint sunbeam was on the floor. The notebook was SF so had more exp. Shots are: the notebook, me in the green chair, me in the cellar, which is the nice bright one. The cellar window by the sink put .4 light on my face an arm's distance away. The sun was bright even though a big storm was coming. 1/36 f4 was 1/4 stop open at 16 fps. C2X, 2' focus. 17mm lens. A-12. Foma newish film. 3 feet. A different 110 reel, small loops, 64 10 1 1 Leader is lighter but still medium. The developer may have lost some power. Dump it and mix new.

Now the question is, will a room look correct using the upside down triangle instead of C2X?

#### Foma 16mm R Jan 18 2022 A

https://youtu.be/NdiBzrSm-WA



Permanganate bleach. Details are on page 37 #15 green book Me int, sun outside, all lights on, 3 feet of film, Light on me was 3.2-1 Weston 1/36 16fps 1200 ASA f5.6/8 c2X 17mm lens Keystone A-12

The old D-94 was used; leader is very dark; 64 6.5 1 1 Alum 3 min bleach 7 ½ min 62 degrees room temp

It is perfect. Not as bright as I thought it woul become. Perhaps the D-94 is weak and lights are not thinning as much. However, the bleach and hardener worked perfectly. Agitation was very subdued. Now I can bleach reversal Foma with Permanganate Sulphate.

#### Foma 16mm R Jan 18 2022 B

https://youtu.be/4W04 3UJYc0



Permanganate bleach. This slate was not single frames. F2.7 Light on my face was .8+ 1200 ASA 1/36 f4 C2X new D-94 Notes do not say how long this was developed. Bleach was 7 ½ min at 62 degrees, 3 clear, Exp and SD were each 1 min. Leader is black. I don't look any lighter (6.5min?) Pictures are warm, underexposed, longer FD and longer Bleach needed.

Images are not that shining bright all the other ones are; these are a little dim. No dots at all.

Permanganate bleached images were a little weak; re-exposure was further away and SD was room temperature 62 F one min. not 68 F. The FD was longer than previous tests, 650 ISO was lower, Chrome Alum 10% was 3 min, Permanganate bleach 8 min but 5 would have worked, at 3 min. silver was gone, Clear was 3 min. Leader turned out dark anyways. Images do not show color but look gray. I hope it looks bright projected, it does hanging to dry...

Phone video of me in rocker

The projector has a tungsten bulb but this looks too warm to me. Other films are more gray. Perhaps a longer clear or the film just is not exposed enough...

Permanganate bleach is working great

#### Foma 16mm R Jan 19 2022

https://youtu.be/i22QZpqxhTo



650 ASA INT A-12 17mm 16fps 2' focus Me in rocker, noonish, overcast, All lights on, all daylight in overhead, tungsten in floor lamp. Bright out. Light was 1.6+ Me C2X f4 1/36 f4 was spot on!

More light, cooler SD, 66 not 68, More FD 6min not 5min new D-94 6min 64 degrees 1 min re-exp, 8-10 inches away, 62

degrees 1 min in D-95 SD Bleach was 8 min clear same both at 62 room temp Film is lighter; leader is still dark. Projection is brown?! Underexposed.

#### Foma 16mm R Jan 24 2022

https://youtu.be/DETTAIpHCg4



The slate says Jan 23 2022

Take 2, Ext. Straight Back, Snowing. Light was 50+1 block C2X f8/11 16fps 100 ASA old 2R Foma R-100 Zoom lens Weston level reading

Develop 64 degrees 3 min exp 1 SD 1 cold not 4 min. Bleach 1 ½ min (dichromate)

Take 3 was left and was solorized.

Straight back pictures look fantastically good! Better than life since it was snowing and whiteing out.

I learned to open the zoom lens to f2.2 to focus so I could SEE, then close it. C2X was used to expose snow.

#### Foma 16mm R Jan 25 2022

https://youtu.be/sA-x1PEUIP0



Take 2 EXT back yard Dichromate new film Foma R-100 almost not out of date. Keystone A-9 J-6765 Elgeet 1 inch f1.9 lens. The time was 5 PM, overcast, snow. A graycard slate was 13-25. The backyard was 25-50 f8/5.6 C2X. Slate 5.6/4 C2X. That's why Take 1 was overexposed; I used the slate graycard reading on the yard. 100 ASA.

Developed in new D-94 64 degrees 3 min re-exp 1 SD 1 in new D-95 old bleach and clear 6 min each 64 3 1 1

Leader is opaque. Pictures can be seen. Strong. Bleached images were yellow, not clear. The frame line is not in the center of the sprocket hole. The projector cannot compensate. I moved the gate over later.

Exposure and development are fantastic! Look Ma, no white spots! Permanganate bleach was used. Green book #15 p.37, p.57

#### Foma 16mm R Jan 27 2022 B

https://youtu.be/RA-xJVId4gQ



EXT Back Yard Permanganate. See page 37 for recipes. Foma R-100 1R newer film 3' of it. Camera A-12 two lens model with Elgeet 1" f1.9 lens. Light was overcast on snow 75 f8/11 100 ASA C2X 64 3 1 1 Permanganate bleach not Dichromate was used. This is lighter than the last one. The 25<sup>th</sup> brighter, beautiful, and the black of the leader is total;

there are NO spots in it

Development was in new chemicals D-94 64 degrees 3 min. A 10% Chrome Alum 3 minuet prebath with easy agitations was used, Permanganate bleach mix 125/125 60 degrees 8 minuets, New clear 60 degrees 6 minuets. Re-exposure was 1 minuet close to the light. Second developer was new D-95 for 1 minuet. New fix was for 2 minuets.

No color cast. Leader is opaque. WOW projected.

This is the end of the bulletin board film loops.

### Jan 28 2022 Forbes Bridge Collapse

Immediately after learning how to expose and develop Foma film myself a local bridge collapsed. I went there, a short walk, and photographed it; TV crewmen didn't want to buy my film, though. Ha ha. Cops let me get right up to the edge. New Foma was used in A-12 17mm & 1 inch 70 some feet at 100 ASA was remaining, no video yet, but I have located the film. It was reversed as above. Permanganate bleach was used to eliminate spots. Clip tests were done first. Two of them; they are taped in the notebook.